



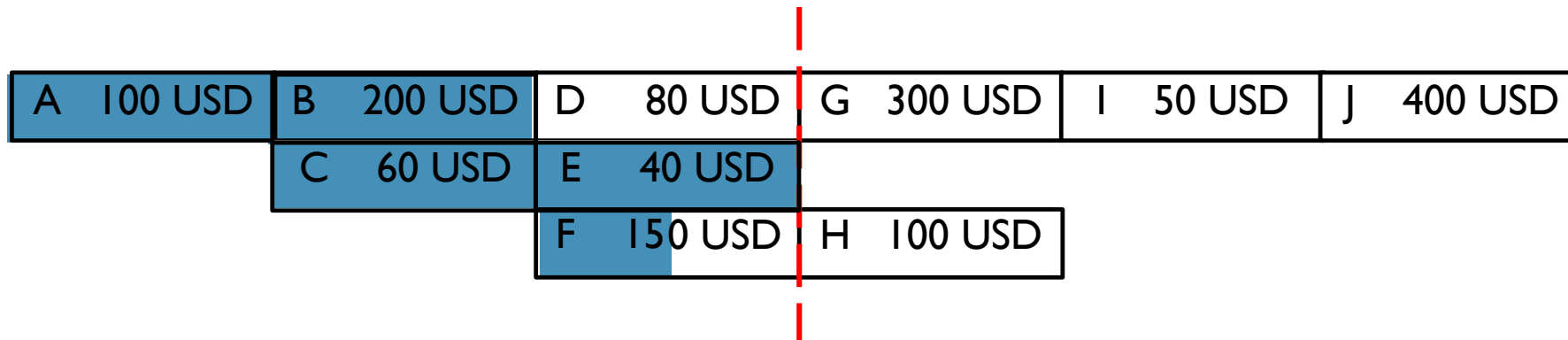
PLANNING AND SCHEDULING DIPLOMA

EARNED VALUE MANAGEMENT - WORKSHOP

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EARNED VALUE EXAMPLE

- The following bar chart shows the activities to complete a project in six months at 1,480 USD



After 3 months, Activities A, B, C, E, and half of F are completed, for a cost of 490 USD. What is the status of the project in terms of budget (over or under) and the schedule (ahead or behind)? What is the Estimated Cost at Completion?

EARNED VALUE EXAMPLE

Answer:

A 100 USD	B 200 USD	D 80 USD	G 300 USD	I 50 USD	J 400 USD
	C 60 USD	E 40 USD			
		F 150 USD	H 100 USD		

- $BCWS = 100 + 200 + 60 + 80 + 40 + 150 = 630 \text{ USD}$
- $BCWP = 100 + 200 + 60 + 40 + 150/2 = 475 \text{ USD}$
- $ACWP = 490 \text{ USD}$
- $BAC = 100 + 200 + 60 + 80 + 40 + 150 + 300 + 100 + 50 + 400 = 1,480 \text{ USD}$

EARNED VALUE EXAMPLE

Answer:

$$\text{CPI} = \text{BCWP} / \text{ACWP} = 475 / 490 = 0.97 < 1$$

$$\text{CV} = \text{BCWP} - \text{ACWP} = 475 - 490 = -15$$



(Over cost)

$$\text{SPI} = \text{BCWP} / \text{BCWS} = 475 / 630 = 0.75 < 1$$

$$\text{SV} = \text{BCWP} - \text{BCWS} = 475 - 630 = -155$$



(Behind Schedule)

EARNED VALUE EXAMPLE

Answer:

Assumption no, 1

$$EAC = BAC / CPI = 1,480 / 0.97 = 1,525.8 \text{ USD}$$

Assumption no, 2

$$EAC = ACWP + (BAC - BCWP) = 490 + (1,480 - 475) = 1,495 \text{ USD}$$



THANKS FOR WATCHING